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(54) Title: DETECTION OF RYANODINE RECEPTOR ANTIBODIES

(57) Abstract: The present invention describes methods, kits and compositions for the detection of ryanodine receptor antibodies in patient serum samples. The invention also describes a method for the manufacture of a pharmaceutical agent for the prevention and/or treatment of the disease myasthenia gravis, and a method of myasthenia gravis prognosis.

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(75) Inventors/Applicants (for US only): SKEIE, Geir, Olive [NO/NO]; Gørbitsgt. 1, N-5035 Bergen (NO). ZORZATO, Francesco [IT/IT]; Via Vittoria, 21, I-44100 Ferrara (IT).

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WO 00/75658 A3

(54) Title: DETECTION OF RYANODINE RECEPTOR ANTIBODIES

(57) Abstract: The present invention describes methods, kits and compositions for the detection of ryanodine receptor antibodies in patient serum samples with the aid of N-terminal fragments of the receptor. The invention also describes a method for the manufacture of a pharmaceutical agent comprising such fragments for the prevention and/or treatment of the disease myasthenia gravis, and a method of myasthenia gravis prognosis.

## INTERNATIONAL SEARCH REPORT

ional Application No  
PCT/NO 00/00200A. CLASSIFICATION OF SUBJECT MATTER  
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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ASE MYGLAND ET AL: "Anti-cardiac ryanodine receptor antibodies in thymoma-associated myasthenia gravis" AUTOIMMUNITY, vol. 17, 1994, pages 327-331, XP002901348 page 330 ---	1-6,8
A	ASE MYGLAND ET AL: "Thymomas express epitopes shared by the ryanodine receptor" JOURNAL OF NEUROIMMUNOLOGY, vol. 62, 1995, pages 79-83, XP002901349 page 80 page 82 -page 83 --- -/-	1-8

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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## INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GEIR OLVE SKEIE ET AL: "Autoimmunity to ryanodine receptor and titin in myasthenia gravis is associated with GM allotypes" AUTOIMMUNITY, vol. 26, 1997, pages 111-116, XP002901350 the whole document ---	1-8
A	ASE MYGLAND ET AL: "Ryanodine receptor autoantibodies in myasthenia gravis patients with a thymoma" ANN NEUROL, vol. 32, 1992, pages 589-591, XP002901351 the whole document ---	1-8
Y	CHEMICAL ABSTRACTS, vol. 130, no. 6, 8 February 1999 (1999-02-08) Columbus, Ohio, US; abstract no. 62650, LEONG, PENG ET AL: "The cytoplasmic loops between domains II and III and domains III and IV in the skeletal muscle dihydropyridine receptor bind to a contiguous site in the skeletal muscle ryanodine receptor" page 1; XP002901352 abstract & J.BIOL.CHEM., 273(45), 29958-29964, 1998, ---	1-6,8
Y	CHEMICAL ABSTRACTS, vol. 129, no. 3, 20 July 1998 (1998-07-20) Columbus, Ohio, US; abstract no. 24678, LEONG, PENG ET AL: "A 37-amino acid sequence in the skeletal muscle ryanodine receptor interacts with the cytoplasmic loop between domains II and III in the skeletal muscle dihydropyridine receptor" XP002901353 abstract & J.BIOL.CHEM., 273(14), 7791-7794, 1998, ---	1-6,8
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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

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